

MODESTO IRRIGATION DISTRICT WILDFIRE MITIGATION PLAN 2021 INFORMATIONAL RESPONSE

**RESPONSES TO WILDFIRE SAFETY ADVISORY
BOARD'S 2021 GUIDANCE ADVISORY OPINION**

July 01, 2021

I. PURPOSE OF THIS 2021 INFORMATIONAL RESPONSE

The California Wildfire Safety Advisory Board (WSAB) issued the *Guidance Advisory Opinion for the 2021 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives* (“2021 WSAB Guidance Advisory Opinion”) on December 15, 2020. Modesto Irrigation District (MID) provides this document to the WSAB in order to respond to each of the recommendations included in the 2021 WSAB Guidance Advisory Opinion. MID will provide a narrative response and/or a cross reference to the location in MID’s Wildfire Mitigation Plan (WMP) where the topic is addressed. Where the recommendation is not applicable to MID, the response will provide a brief description supporting this conclusion.

II. CONTEXT SETTING INFORMATION

WSAB requested that POU provide an informational table to assist the Staff and Board member in understanding the unique characteristics of each POU.

Table 1: Context-Setting Information

Utility Name	Modesto Irrigation District	
Service Territory Size	560 square miles	
Owned Assets	<input checked="" type="checkbox"/> Transmission <input checked="" type="checkbox"/> Distribution <input checked="" type="checkbox"/> Generation	
Number of Customers Served	131,600 customer accounts Statistics as of 12/31/2020	
Population Within Service Territory	296,000 people Approximate population value based on average population of 2.9 per household	
Customer Class Makeup	<i>Number of Accounts</i>	<i>Share of Total Load (MWh)</i>
	77.4% Residential; 9.8 % Commercial; 0.1% Industrial; 12.7% Other Statistics as of 12/31/2020	38.3% Residential; 25.8 % Commercial; 30.5% Industrial; 5.3% Other Statistics as of 12/31/2020
Service Territory Location/Topography¹	86.45% Agriculture 7.60% Urban 3.03% Hardwood Woodland 2.27% Water 0.32% Barren/Other 0.25% Hardwood Forest	

¹ This data shall be based on the California Department of Forestry and Fire Protection, California Multi-Source Vegetation Layer Map, depicting WHR13 Types (Wildlife Habitat Relationship classes grouped into 13 major land cover types) available at: <https://www.arcgis.com/home/item.html?id=b7ec5d68d8114b1fb2bfbf4665989eb3>.

Service Territory Wildland Urban Interface² (based on total area)	0.54% Wildland Urban Interface; 2.02% Wildland Urban Intermix;																																												
Percent of Service Territory in CPUC High Fire Threat Districts (based on total area)	<input checked="" type="checkbox"/> Includes maps Tier 2: 0% Tier 3: 0%																																												
Prevailing Wind Directions & Speeds by Season	Average Wind Speed 1996-2006 <table border="1"> <thead> <tr> <th></th> <th>Month</th> <th>JAN</th> <th>FEB</th> <th>MAR</th> <th>APR</th> <th>MAY</th> <th>JUN</th> <th>JUL</th> <th>AUG</th> <th>SEP</th> <th>OCT</th> <th>NOV</th> <th>DEC</th> <th>ANN</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Wind</td> <td>Speed</td> <td>5.0</td> <td>6.2</td> <td>7.0</td> <td>7.8</td> <td>8.9</td> <td>9.4</td> <td>8.6</td> <td>8.1</td> <td>6.9</td> <td>6.0</td> <td>5.0</td> <td>5.6</td> <td>7.0</td> </tr> <tr> <td>Direction</td> <td>SE</td> <td>SE</td> <td>NW</td> <td>NW</td> <td>NW</td> <td>NW</td> <td>NNW</td> <td>NNW</td> <td>NW</td> <td>NW</td> <td>NW</td> <td>SE</td> <td>NW</td> </tr> </tbody> </table> <p>Source: Western Regional Climate Center at https://wrcc.dri.edu/Climate/wind.php</p>		Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	Wind	Speed	5.0	6.2	7.0	7.8	8.9	9.4	8.6	8.1	6.9	6.0	5.0	5.6	7.0	Direction	SE	SE	NW	NW	NW	NW	NNW	NNW	NW	NW	NW	SE	NW
	Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN																															
Wind	Speed	5.0	6.2	7.0	7.8	8.9	9.4	8.6	8.1	6.9	6.0	5.0	5.6	7.0																															
	Direction	SE	SE	NW	NW	NW	NW	NNW	NNW	NW	NW	NW	SE	NW																															
Miles of Owned Lines Underground and/or Overhead	Overhead Distribution: 1,047.3 miles Overhead Transmission: 384.5 miles Underground Distribution: 1,853.2 miles Underground Transmission: 0 miles Explanatory Note 1 - Methodology for measurement is line miles.																																												
Percent of Owned Lines in CPUC High Fire Threat Districts	<i>Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)</i>																																												
	Tier 2: 0% Tier 3: 0%																																												
	<i>Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)</i>																																												
	Tier 2: 0.4% (1.55miles, Outside Service Territory) Tier 3: 0%																																												
Customers have ever lost service due to an IOU PSPS event?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																												
Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																												
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																												
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, then provide the following data for calendar year 2020: <i>Number of shut-off events:</i> 0 <i>Customer Accounts that lost service for >10 minutes:</i> N/A <i>For prior response, average duration before service restored:</i> N/A																																												

² This data shall be based on the definitions and maps maintained by the United States Department of Agriculture, as most recently assembled in *The 2010 Wildland-Urban Interface of the Conterminous United States*, available at https://www.fs.fed.us/nrs/pubs/rmap/rmap_nrs8.pdf.

III. CROSS REFERENCE TO STATUTORY REQUIREMENTS

WSAB requested that POU's provide a clear roadmap as to where each statutory requirement is addressed within the POU WMP.

Table 2: Cross References to Statutory Requirements

Requirement	Statutory Language	Location in WMP
Persons Responsible	PUC § 8387(b)(2)(A): An accounting of the responsibilities of persons responsible for executing the plan.	Section III Page 10-11
Objectives of the Plan	PUC § 8387(b)(2)(B): The objectives of the wildfire mitigation plan.	Section II Page 7
Preventive Strategies	PUC § 8387(b)(2)(C): A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Section V Page 17-25
Evaluation Metrics	PUC § 8387(b)(2)(D): A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance and the assumptions that underlie the use of those metrics.	Section VIII Page 27-29
Impact of Metrics	PUC § 8387(b)(2)(E): A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	Section VIII Page 28
Deenergization Protocols	PUC § 8387(b)(2)(F): Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.	Section V Page 24-25
Customer Notification Procedures	PUC § 8387(b)(2)(G): Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.	Section III Page 13-15
Vegetation Management	PUC § 8387(b)(2)(H): Plans for vegetation management.	Section V Page 22-24
Inspections	PUC § 8387(b)(2)(I): Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Section V Page 23-24

<p>Prioritization of Wildfire Risks</p>	<p>PUC § 8387(b)(2)(J): A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric utility’s or electrical cooperative’s service territory. The list shall include, but not be limited to, both of the following:</p> <p>(i) Risks and risk drivers associated with design, construction, operation, and maintenance of the local publicly owned electric utility’s or electrical cooperative’s equipment and facilities.</p> <p>(ii) Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned electric utility’s or electrical cooperative’s service territory.</p>	<p>Section IV Page 15-17</p>
<p>CPUC Fire Threat Map Adjustments</p>	<p>PUC § 8387(b)(2)(K): Identification of any geographic area in the local publicly owned electric utility’s or electrical cooperative’s service territory that is a higher wildfire threat than is identified in a commission fire threat map, and identification of where the commission should expand a high fire threat district based on new information or changes to the environment.</p>	<p>Section V Page 18-19</p>
<p>Enterprisewide Risks</p>	<p>PUC § 8387(b)(2)(L): A methodology for identifying and presenting enterprisewide safety risk and wildfire-related risk.</p>	<p>Section IV Page 17</p>
<p>Restoration of Service</p>	<p>PUC § 8387(b)(2)(M): A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.</p>	<p>Section VII Page 26-27</p>
<p>Monitor and Audit</p>	<p>PUC § 8387(b)(2)(N): A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following</p> <p>(i) Monitor and audit the implementation of the wildfire mitigation plan.</p> <p>(ii) Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies.</p> <p>(iii) Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, other applicable statutes, or commission rules.</p>	<p>Section VIII Page 28-29</p>

<p style="text-align: center;">Qualified Independent Evaluator</p>	<p>PUC § 8387(c): The local publicly owned electric utility or electrical cooperative shall contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan. The independent evaluator shall issue a report that shall be made available on the Internet Web site of the local publicly owned electric utility or electrical cooperative, and shall present the report at a public meeting of the local publicly owned electric utility’s or electrical cooperative’s governing board.</p>	<p style="text-align: center;">Section IX Page 30</p>
---	---	---

IV. WSAB GUIDANCE ADVISORY OPINION RECOMMENDATIONS

The WSAB Guidance Advisory Opinion identifies 14 specific recommendations that POU’s are requested to address in their 2021 WMPs. As specified in Public Utilities Code § 8387(b)(1), each POU is required to perform a comprehensive revision to the POU’s WMP at least once every three years. Pursuant to this guidance, the POU’s will be updating their WMPs based on the direction of their local governing boards within this three-year cycle. Because the WSAB’s recommendations have been provided after the initial WMP submission, the POU’s will have varying capacities to fully address each recommendation in their 2021 WMP. This Section IV restates each of the WSAB recommendations and provides an opportunity for each POU to do one or more of the following: (1) provide a narrative response to the recommendation; (2) provide a cross reference to where in the POU’s WMP this topic is addressed; (3) describe why the recommendation is not applicable to the POU; or (4) inform the WSAB of the POU’s intent to address the recommendation at the point of the POU’s next comprehensive revision, occurring in either the 2022 or 2023 WMP.

A. Plan Structure

WSAB Recommendation #1: Provide context-setting information about the POU and provide a simple guide to where the statutory requirements are addressed within the WMP.

MID Response: *Sections II and Section III above in this template.*

WSAB Recommendation #2: Provide a short description of the POU’s public review and approval (if required) for the WMP. This description may also include a brief explanation of the funding mechanisms for wildfire mitigation efforts.

***MID Response:** MID plans to update the Wildfire Mitigation Plan (WMP or Plan) annually, with a comprehensive revision within the 3-years cycle. The comprehensive revision includes major changes to the WMP with review and approval by the Board of Directors. The Board of Directors is comprised of five board members elected by voters within MID’s service area to serve a four-year term. The General Manager (GM) of MID directs the Assistant General Manager (AGM) of Transmission and Distribution in the development and implementation of the WMP. The AGM of T&D has the primary responsibility for the development and implementation of the WMP, in compliance with SB 901, and presents the WMP to the Board of directors for review and approval. Public Utilities Code Section 8387(c) requires MID to contract with a qualified Independent Evaluator (IE) with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of this Plan. The plan will be evaluated by IE within three years for comprehensive updates. MID will also hire IEs for plan evaluation on as-needed basis within the three-year period. The IE’s report will be presented to the MID Board at a public meeting and the report will also be posted to MID’s website.*

MID’s WMP Location: Section I (A)(B), Section III(B)

WSAB Recommendation #3: Identify where the POU has posted the most recent Independent Evaluator (IE) Report and if your POU plans to enhance future IE reports, please summarize in what ways.

***MID Response:** MID has posted its most recent Independent Evaluator Report (2019) on its website under the Newsroom page in the navigation bar/menu tab. A link of MID’s California Wildfire Public Safety information including the IE Report can be found at the link below.*

<https://www.mid.org/about/newsroom/wildfiresafety/default.html>

MID’s WMP Location: Section IX

WSAB Recommendation #4: Develop, in collaboration with POU industry associations, WMP guidelines for future WMPs, understanding that it may take multiple cycles for POU’s to integrate these recommendations into the WMPs.

***MID Response:** This document includes, as appropriate, responses to the recommendations in the WSAB’s Guidance Advisory Opinion for the POU’s’ 2021*

WMP. This document also represents the combined effort of the POU industry associations to further the development of the template to respond to the WSAB's Guidance Advisory Opinion in a future reporting WMP cycle.

MID's WMP Location: Section VIII (C)

B. Customer Impacts

WSAB Recommendation #5: Describe the potential impact investor-owned utilities (IOU) public safety power shutoff (PSPS) events could have on POU customers and how the POU manages these impacts. For POU's that are also balancing authorities, describe the criteria for wildfire related de-energizations. Responses shall only provide aggregated information that does not provide customer-specific information or other potentially sensitive data.

***MID Response:** Customers are unlikely to be directly impacted by an IOU PSPS event because MID's service territory is very low risk of wildfire impact. MID has 0% of service territory in CPUC High Fire Threat Districts (including Tier 2 and Tier 3). MID owns a very small percentage (0.4%) of lines outside of its service territory in CPUC High Fire Threat Districts Tier 2. MID owns 0% of Overhead Distribution lines in CPUC High Fire Threat District for Tier 2 and 3.*

MID has the authority and responsibility to preemptively shut off power due to high fire-threat conditions; however, this option will only be used in extraordinary circumstances.

Due to the low risk of a catastrophic fire within MID's service territory, MID is not considering de-energization for public safety during critical fire weather conditions.

MID's WMP Location: Section V (F)

WSAB Recommendation #6: Describe the utility customer communication plans with respect to wildfires and PSPS, and in particular describe the methods, content and timing used to communicate with the most vulnerable customers, such as Access and Functional Needs (AFN) customers, medical baseline customers, non-English speakers, and those at risk of losing water or telecommunications service.

***MID Response:** Customers are unlikely to be directly impacted by an PSPS event because MID's service territory is very low risk of wildfire impact. MID is not adopting specific protocols for executing a Public Safety Power Shutoff (PSPS) to any portions of its electric distribution system. Authorized MID personnel will communicate with the applicable fire departments, Stanislaus County's Office of Emergency Services, local hospitals and other*

local government agencies with respect to wildfires. In the event of an unexpected PSPS, MID will convey information to the public through communication lines such as the MID website, local media outlets and social media as appropriate to deliver critical information. Such information may be translated to other major languages spoken in the area.

MID's WMP Location: Section III (D), Section V (F)

C. The Grid

WSAB Recommendation #7: Provide details on each POU's system hardening and grid design programs, including: (1) the goals of the programs and the risk any particular program is designed to mitigate; (2) approach to PSPS mitigation and prevention; and (3) identify any resource shortages.

MID Response: *In a continuous effort to enhance the system and increase reliability, MID is currently implementing the following projects or design changes.*

REPLACE WOOD POLES

MID has completed a project to replace woodpecker damaged wood poles with composite poles at selected locations. Composite poles have significantly lower burning properties than wood poles and will also not be damaged by woodpeckers. Composite poles perform better than wood poles in brush fires.

REPLACE OVERHEAD #6AWG CONDUCTOR

A portion of MID overhead distribution lines consists of #6AWG copper. Some segments of these conductors have experienced brittleness and have shown signs of metal fatigue. During fault and high wind conditions some of these lines have a tendency to break and fall on the ground. MID has assessed such locations and has prioritized the replacement of such portions of #6AWG copper with #4 ACSR conductors. This project will continue until all #6AWG copper is replaced at identified locations.

AVIAN PROTECTION

System events caused by bird contact can cause a conductor breakdown resulting in ignition of vegetation. MID's Avian Protection Plan procedure details the protection of endangered species from energized lines. To address the issue of the ignition of vegetation, which may be initiated as a result of bird contact, MID has implemented several strategies. Strategies include – the use of perch deterrents, conductor insulators and jumper-covers, avian diverters and installation of nesting platforms. The nesting

platforms are installed away from MID equipment at independent locations to protect avian and facilities. At selected locations, phase spacing between conductors has been increased to provide additional clearances. By doing so, birds will be less likely to create a connection between the conductors.

FUSE REPLACEMENT

MID has determined that older style drop down (expulsion) fuses have a tendency to generate an arc when operated. The arc produced has the possibility of initiating a fire under the right circumstances. MID has completed a project to replace these fuses, located east of Hazeldean Road, with a Cal Fire-approved fuse which suppresses and contains the arc. These fuses substantially reduce the risk of initiating wildfires. Any new fuse added or replaced in the eastern portion of MID's service territory will be Cal Fire-approved fuses.

EQUIPMENT FAILURE

MID understands that equipment failure can lead to ignition of nearby vegetation or other flammable material. MID monitors and inspects its distribution equipment (switches, insulators, transformers, surge arrestors etc.) on a regular basis to minimize hazards related to equipment failure. When defective equipment is found, the equipment is removed from service until repairs or replacement is completed.

The Substation Department has procedures to monitor and inspect substation equipment utilizing visual, mechanical and electrical tests at specified intervals. Based on the inspection results, faulty equipment is repaired or considered for replacement.

MID's WMP Location: Section V (B)

WSAB Recommendation #8: Describe annual visual patrols on potentially impacted circuits and the risks the POU is inspecting for. Describe whether and how system inspections lead to system improvements. Describe line patrols before, during, and/or after a critical fire weather event, such as a Red Flag Warning with strong winds, or following a fire that burned in areas where electric facilities are or could have been impacted.

MID Response: *MID's Trouble Department monitors and inspects overhead distribution and transmission lines on a yearly basis. This department also monitors and inspects vegetation around the overhead power lines as described in the vegetation management programs. The Substation Department inspects the condition of its equipment on a regular basis.*

MID performs annual visual patrols on 100% of its electric circuits. In the Tier 2 area, MID performs 4 visual patrols per year to ensure that there are no vegetation encroachments or hazards in relation to MID facilities and to ensure that MID lines and equipment are not at risk of failure. If there are any vegetation or equipment concerns found during any of the patrols, a priority repair or maintenance tag is generated to address the concern as soon as possible. If there is an unforeseeable fire event that burns near an area where MID owns electric facilities, the Trouble Department will perform inspections of the line, equipment, and vegetation as it is safe to do so. Any issues or hazards found will be addressed immediately.

MID's WMP Location: Section II (C)

WSAB Recommendation #9: Describe options considered by POU (including through the joint efforts of the POU associations) to identify previously unidentified risks that could lead to catastrophic wildfires.

***MID Response:** MID prides itself in taking a proactive approach to identifying previously unidentified risks through its associations with state and local emergency organizations. MID annually coordinates and communicates with the relevant safety agencies as well as other relevant local and state agencies pursuant to the California Office of Emergency Services' Standardized Emergency Management System (SEMS) Regulations. MID also holds management roles at the Stanislaus County Office of Emergency Services (OES) Stanislaus, a committee made up of city, county, state and federal agencies, special districts, volunteer agencies, and private agencies designed to discuss newly identified fire emergency risks and preventative resolutions.*

MID is a member of the California Utility Emergency Association (CUEA), which has a key role in ensuring communications between utilities and Cal OES during emergencies. MID also participates in the CUEA's Mutual Assistance Agreement, which is a mutual assistance agreement covering utilities across a number of western states. In addition, MID is also a member of American Public Power Association (APPA) and participates in its mutual aid program. This also provide a mechanism to communicate utilities for mutual assistance during emergencies.

MID maintains close and interactive relationships with neighboring utilities to share information about potential threats and remedies. MID also participates yearly in the Western Underground Committee conferences with power utility companies from the Western United States, Canada, and Hawaii to share resources. MID is committed to developing its preparedness through training workshops at regular intervals.

D. Risk Assessment

WSAB Recommendation #10: Describe the particular wildfire risks associated with system design and construction such as topography and location near the HFTD areas of another utility's service territory. Describe any G.O. 95 exempt assets and possible updates to G.O. 95 that could facilitate more resilient utility transmission and distribution assets.

MID Response: MID's assessment of wildfire risks are discussed in Section IV of MID's WMP. Possible wildfire risks associated with design and construction for MID include the topography concerns of unpredictable weather patterns, possible droughts, hot summers and low humidity, high winds, dry brush and wild grass under some of MID lines to the East of MID's Service Territory. Equipment failures are also a risk MID closely monitors that could possibly cause an ignition.

The following provides responses to specific questions included in the WSAB's 2021 WSAB Guidance Advisory Opinion:

- How does the utility assess its risks associated with system design and construction?

MID Response: MID continuously evaluates and makes modifications to existing designs to assess any risks associated with system design and construction. MID's electric facilities are designed and constructed to meet or exceed the relevant federal, state, or industry standards. MID treats CPUC General Orders (GO) 95 as key set of industry standards for design and construction of overhead electrical facilities. MID meets or exceeds all standards in GO 95.

- What design and construction standards has the POU implemented that go beyond G.O. 95 or other General Order standards related to design and construction?

MID Response: MID monitors and follows as appropriate the Institute of Electrical and Electronics Engineers (IEEE) standards and National Electric Safety Code (NESC). MID designs and specifies materials to meet or exceed industry standards.

MID's WMP Location: Section IV (A), Section V (B)

E. SITUATIONAL AWARENESS TECHNOLOGY

WSAB Recommendation #11: Provide context-setting information about the prevailing wind directions and speeds, differentiated by season, along with average weather conditions by season. Describe how and why situational awareness technology is installed, and where on the system. Describe the decision-making process regarding the installation of situational

awareness technology, including constraints such as budgets, availability of equipment, knowledge to effectively deploy, or qualified personnel to install and monitor effectively. Identify any other agencies, utilities, or fire professionals that the data from these devices is shared with.

MID Response: *The following paragraph taken from the Cal Fire 2020 Tuolumne-Calaveras-San Joaquin-Stanislaus Unit Fire Plan.*

Typically fire season temperatures range from the lows in the upper 50’s to highs in the 90’s. Periods of temperatures in the triple digits are not uncommon and can last for several days. Relative humidity runs in the mid-teens to mid-twenties during the daylight hours, often with poor recovery in the overnight hours. Periods of extreme heat are occasionally accompanied by single digit humidity. Prevailing winds are out of the northwest in the lower elevations below Highway 120 and are affected by topography in the upper elevations and are also greatly influenced by the Tuolumne river drainage. Above 3,000 feet the temperatures are often a few degrees cooler and lag the delta influence the lower elevations receive. During late August and September, the upper reaches of the battalion are subject to thunderstorm activity in the afternoons. This type of summer weather is ideal for wildland fire.

Source: <https://osfm.fire.ca.gov/media/bdppiaqi/2020-tcu-fire-plan.pdf>

Average sustained wind speed varies throughout the year from 5.0 to 9.4 miles per hour. Average wind speed and direction collected from Modesto Airport is stated below:

Source: Western Regional Climate Center at <https://wrcc.dri.edu/Climate/wind.php>

	Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
Wind	Speed	5.0	6.2	7.0	7.8	8.9	9.4	8.6	8.1	6.9	6.0	5.0	5.6	7.0
	Direction	SE	SE	NW	NW	NW	NW	NNW	NNW	NW	NW	NW	SE	NW

Average Wind Speed 1996-2006

MID’s WMP Location: Section IV (A)

F. VEGETATION MANAGEMENT

WSAB Recommendation #12: Describe treatment plans for all types of vegetation associated with utility infrastructure, from the ground to the sky, which includes vegetation above and below electrical lines.

MID Response: *MID meets or exceeds the minimum industry standard vegetation management practices. To comply with industry, state and federal standards, MID maintains the following internal vegetation management procedures: T&D Vegetation Management Program (115kV and below) and 230kV Transmission Vegetation*

Management Program. These procedures provide the methodology in preventing encroachment into minimum vegetation clearance distance of energized overhead lines and on clearing vegetation from the energized lines by maintaining safe clearance.

These standards require significantly increased clearances in the HFTD. MID will use specific knowledge of tree growth rates and tree species to determine the appropriate time-of-trim clearance in each circumstance.

The following provides responses to specific questions included in the WSAB's 2021 WSAB Guidance Advisory Opinion:

- Describe how vegetation management in the HFTD or Fire Threat Zones differs from other areas, including within private property and urban landscaping.

MID Response: *MID performs vegetation patrols four times per year in its HFTD assuring that the Minimum Vegetation Clearance Distance (MVCD) is met, or exceeded, at all times in this area.*

- Describe how the POU tracks new vegetation growth that occurs in areas that has previously been cleared or treated.

MID Response: *MID tracks new vegetation growth in its HFTD by performing vegetation patrols in the HFTD four times per year.*

MID's WMP Location: Section V (C)

WSAB Recommendation #13: List the qualifications of any experts relied upon, such as scientific experts in ecology, fire ecology, fire behavior, geology, and meteorology. Specify the level of expertise of the POU staff that manages the contractors performing vegetation management. Describe measures each POU takes to ensure that POU staff and contractors comply with or verify compliance with Cal/OSHA standards on Minimum Approach Distances (MAD).

MID Response: *MID's Vegetation Manager is a Journey Level Lineworker and a member of the International Arboriculture Association and Utilities Arborist Association. MID's tree trimming services are contracted out and performed by Qualified Line Clearance Tree Trimmers (QLCTT). The contractor adheres to the Minimum Approach Distances (MADs) set by Cal/OSHA. MID's Vegetation Manager makes periodic field visits to check trimming activities and worksite safety.*

MID's WMP Location: Section V (C)

WSAB Recommendation #14: Describe whether the POU has considered innovative and alternative approaches to vegetation management.

MID Response: *MID has integrated its annual line and equipment patrols to encompass vegetation patrols. As annual line patrols are performed, MID personnel identify any vegetation that may encroach the Minimum Vegetation Clearance Distance (MVCD) before the next routine trim cycle period (approximately a 3-year routine trim cycle).*

MID's WMP Location: Section V (C)